

CALIFORNIA DEPARTMENT OF TRANSPORTATION DUTY STATEMENT

CLASSIFICATION TITLE Structural Design Technician III	DISTRICT/DIVISION/OFFICE DES/GS/Office of Geotechnical Support	
WORKING TITLE Structural Design Technician III	POSITION NUMBER 559-316-3036-xxx	EFFECTIVE 09/12/2006

As a valued member of the Caltrans team, you make it possible for the Department to improve the mobility across California by being innovative and flexible; reporting to work as scheduled; working cooperatively with team members and others; and treating others fairly, honestly and with respect. Your efforts are important to each member of the team, as well as those we serve.

GENERAL STATEMENT: The Structural Design Technician III is the advanced journey level of the Structural Design Technician series. The incumbent is responsible for the preparation of the most difficult and complex plans for all types of projects for Geotechnical Services.

TYPICAL DUTIES:

Percentage Essential (E)/Marginal (M) ¹	Job Description
40% (E)	Lead person for an office of Structural Design Technicians responsible for preparing geological drawings (Log of Test Borings) for the Department's contract plans using the MicroStation software program. Sets priorities for the engineering graphics unit and assigns work accordingly, assures quality standards are met, and maintains a project-tracking database. Assists co-workers with the more difficult and complex work. Also prepares engineering report graphics, technical presentations and training graphics.
30% (E)	Performs drafting of log of test borings using the MicroStation software program. Works on special projects such as maintaining the transportation laboratory employee board and creating posters or other documents as directed.
20% (E)	Establishes updated drafting standards for geological drawings, works to improve the unit's business practices, and maintains computer files of geological boring logs. Participates on technical committees.
10% (E)	Liaison with Caltrans Headquarters and District personnel, public agencies, and the private sector regarding geological drafting standards and how to access our standard geological borders.

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- ESSENTIAL FUNCTIONS are the core duties of the position that cannot be reassigned
 - MARGINAL FUNCTIONS are minor tasks of the position that can be assigned to others

SUPERVISION OR GUIDANCE EXERCISED OVER OTHERS

This is not a supervisory position, however, the incumbent will act as a lead worker for the Structural Design Technicians in the office.

KNOWLEDGE, ABILITIES AND ANALYTICAL REQUIREMENTS

Satisfactory performance in this position requires:

- Knowledge of standard practices, materials and equipment used in the production of maps, plans, charts, graphs, and geological drawings, or other graphic representations for engineering reports.
- Knowledge of computer programs such as MicroStation, MS Word, MS Excel, MS PowerPoint, MS Access, FileMaker Pro, and Lotus Notes. Ability to learn new software applications. Knowledge of engineering mathematics, and various reproduction processes.
- Indexing and filing of maps and other materials.
- Principles of effective communication and management.
- Make calculations related to drafting work and determine appropriate methods to be used for desired product.
- Establish and maintain geological drafting standards, prepare drafting revisions to various manuals, establish and maintain computer-drafting procedures, analyze situations accurately and adopt an effective course of action.
- Establish and maintain effective and cooperative relationships with those contacted in the course of the work, maintain records and prepare correspondence and reports, communicate effectively, read and write English at a level required for successful job performance, and follow oral and written directions.
- Knowledge of geologic field notes and the ability to transcribe these notes as completed Log of Test Borings drawings based on established standards.

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCE OF ERROR

The Structural Design Technician III is required to make independent judgments and decisions of how to best process and/or utilize CADD systems to produce graphics projects such as complex Log of Test Boring sheets, arrangements and layouts. The incumbent will be responsible for the correct interpretation of engineering designs and geologic field logs and will bring to the engineer's / geologist's attention any errors or insufficiencies. The incumbent is responsible for the quality, completeness, and accuracy of the projects assigned. Errors and/or delays in work produced may result in delays to construction projects and/or contractor claims that result in financial damages levied against the State.

PUBLIC AND INTERNAL CONTACTS

Daily communication essential to effective drafting services will be maintained by the Structural Design Technician III with engineers, geologists, and other staff members. Public contact is frequent, the

Structural Design Technician III may be required to confer with salespersons regarding new computer hardware / software, equipment, and technologies in the drafting field.

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

Employee may be required to sit for long periods of time using a keyboard and video display terminal. Mental requirements include ability to concentrate in order to review and create documents and meet strict deadlines at times. Develops new insights into situations and applies innovative solutions to make organizational improvements. Comprehends, interprets and analyses large volumes of technical and administrative data. Emotional requirements include the ability to develop and maintain cooperative working relationships. Considering and responding appropriately to the needs, feelings, and capabilities of different people in different situations; is tactful and treats others with respect.

WORK ENVIRONMENT

While at their base of operation, employees will work in a climate-controlled office under artificial lighting.

I have read, and understand the duties listed above and can perform them either with or without reasonable accommodation. (If you believe you may require reasonable accommodation, please discuss this with your hiring supervisor. If you are unsure whether you require reasonable accommodation, inform the hiring supervisor who will discuss your concerns with the Reasonable Accommodation Coordinator.)

Employee Name (please print)

Employee Signature

Date

I have discussed the duties with and provided a copy of this duty statement to the employee named above.

Supervisor Name (please print)

Supervisor signature

Date